

(19)



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(11)

EP 0 772 249 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
04.11.1998 Bulletin 1998/45

(51) Int. Cl.⁶: H01L 33/00, H01S 3/19

(43) Date of publication A2:
07.05.1997 Bulletin 1997/19

(21) Application number: 96117792.0

(22) Date of filing: 06.11.1996

(84) Designated Contracting States:
DE FR GB IT NL

(30) Priority: 06.11.1995 JP 287189/95
24.11.1995 JP 305279/95
24.11.1995 JP 305280/95
24.11.1995 JP 305281/95
06.12.1995 JP 317850/95
20.12.1995 JP 332056/95
16.07.1996 JP 186339/96
29.08.1996 JP 228147/96

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(54) Nitride semiconductor device

(57) A nitride semiconductor device has a nitride semiconductor layer structure. The structure includes an active layer (16) of a quantum well structure containing an indium-containing nitride semiconductor. A first nitride semiconductor layer (101) having a band gap energy larger than that of the active layer (16) is provided in contact with the active layer (16). A second nitride semiconductor layer (102) having a band gap energy smaller than that of the first layer (101) is provided over the first layer (101). Further, a third nitride semiconductor layer (103) having a band gap energy larger than that of the second layer (102) is provided over the second layer (102).

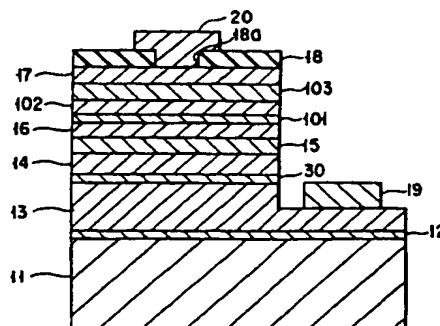


FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 96 11 7792

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Place of search THE HAGUE		Date of completion of the search 11 September 1998	Examiner De Laere, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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